

John H. Debes, IV
NASA Postdoctoral Program Fellow
Goddard Space Flight Center
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Education

Ph.D., Astronomy, Pennsylvania State University, August, 2005. Thesis *Digging in the Stellar Graveyard for Extrasolar Planets*. Advisor: Steinn Sigurdsson

B.A., Physics with Honors, Johns Hopkins University, 1999 GPA: 3.85/4.00

Employment

NASA Postdoctoral Program Fellow, Goddard Space Flight Center	2008-Present
Postdoctoral Research Associate, Carnegie Institution of Washington	2005-2008
Research Assistant, Pennsylvania State University	2004-2005
NASA Graduate Student Research Program fellow	2001-2004
Research Assistant, Pennsylvania State University	2000-2001
Teaching Assistant, Pennsylvania State University	1999-2000

Grants and Observations

Co-I, HST Cycle 18 #12228 *Probing for Exoplanets Hiding in Dusty Debris Disks: Inner (<10 AU) Disk Imaging, Characterization, and Exploration*

PI, CARMA Program c0557, *A CARMA Study of Sculpted Debris Disks*

Co-I, SIM Science Studies *Gaia-SIM legacy project* \$75,000

PI, Las Campanas Observatories *A Magellan Search for Variability in DAZ Line Strengths*

PI, HST Cycle 16 #11148 *High Contrast Imaging of Dusty White Dwarfs* \$131,329

Co-I, HST Cycle 15 #10857 *Are Organics Common in Outer Planetary Systems?* \$78,453

PI, HST Cycle 14 #10560 *Confirming Planetary Candidates in the Stellar Graveyard with NICMOS* \$12,223

PI, Spitzer Cycle 1 #3655 *Searching the Stellar Graveyard for Planets and Brown Dwarfs with SST* \$38,000

PI, HST Cycle 12 #9834 *Finding Planets in the Stellar Graveyard: A Faint Companion Search of White Dwarfs with NICMOS* \$54,642

PI, NOAO Gemini GN-2004B-DD-9 *Confirming a Planetary Candidate around G29-38*

PI, HET PSU03-3-038, PSU04-2-010 *Monitoring 2 DAZs for Line Strength Variability*

Co-I, CFHT 2003B-H42A, 2004A-H59A, 2004B-H53A *Searching for Substellar Companions to White Dwarfs*

Book Chapters

Debes, J. H., The Formation and Evolution of Dust Disks Around White Dwarfs, *Atmospheres and Environment of White Dwarfs*, (in press), ed. D. W. Hoard, Wiley-VCH

Refereed Papers

Debes, J. H. et al., WIRED I:A Bright IR Excess Due to Dust Around the Heavily Polluted White Dwarf GALEX J193156.8+011745 2010, ApJ, in press

Debes, J. H. & Jackson, B. K., Too Little, Too Late: How the Tidal Evolution of Hot Jupiters Affects Transit Surveys of Clusters 2010, ApJ, 723, 1703

Anglade-Escude, G., Shkolnik, E., Weinberger, A. J., Thompson, I. B., Osip, D. J., **Debes, J. H.**, Strong Constraints on the Putative Planet Candidate around VB 10 Using Doppler Spectroscopy 2010 ApJL, 711, 24

Debes, J. H., Weinberger, A. J., Kuchner, M. J., Interstellar Medium Sculpting of the HD 32297 Debris Disk 2009, ApJ, 702, 318

Schneider, G., Weinberger, A. J., Becklin, E. E., **Debes, J. H.**, Smith, B. A., STIS Imaging of the HR 4796A Circumstellar Debris Ring 2009, AJ, 137, 53

Debes, J. H., Weinberger, A. J., Song, I. Color Gradients Detected in the HD 15115 Circumstellar Disk 2008, ApJL, 684, 41

Debes, J. H., & Lopez-Morales, M. A Second Look at the Metal Line Variability of G29-38 2008, ApJL, 684, 41

Debes, J. H., Weinberger, A. J., Schneider, G., Complex Organic Materials in the HR 4796A Circumstellar Disk 2008, ApJL, 673, 191

Debes, J. H., Sigurdsson, S., The Survival Rate of Ejected Terrestrial Planets with Moons 2007, ApJL, 668, 167

Debes, J. H., et al., Cool Customers in the Stellar Graveyard IV: Spitzer Search for Mid-IR excesses Around Five DAs 2007, AJ, 134, 1662

Debes, J. H. Measuring M Dwarf Winds with DAZs 2006, ApJ, 652, 636

Debes, J. H., et al., Detection of a Variable Infrared Excess Around SDSS 121209.31+013627.7 2006, ApJL, 647, 147

Debes, J. H., Sigurdsson, S., The Nature of the Substellar Companion to GQ Lup 2006, A&A, 451, 351

Debes, J. H., Ge., J., Ftaclas, C., Cool Customers in the Stellar Graveyard III: Limits to Substellar Objects around Nearby White Dwarfs 2006, AJ, 131, 640

Debes, J. H., Sigurdsson, S., & Woodgate, B., Cool Customers in the Stellar Graveyard II: Limits to Extrasolar Planets Around Nearby DAZ White Dwarfs 2005, AJ, 130, 1221

Debes, J. H., Sigurdsson, S., & Woodgate, B., Cool Customers in the Stellar Graveyard I: Limits to Extrasolar Planets Around G 29-38 2005, ApJ, 633, 1168

- Debes, J. H.** & Ge, J., High-Contrast Imaging with Gaussian Aperture Pupil Masks 2004, PASP, 116, 674
- Debes, J. H.**, Ge, J., Kuchner, M., Rogosky, M., Using Notch-Filter Masks for High Contrast Imaging of Extrasolar Planets 2004, ApJ, 608, 1095
- Chakraborty, A., Ge, J. & **Debes, J. H.**, Nature of Companions of G Type Stars Using Adaptive Optics 2002, AJ, 124, 1127
- Debes, J. H.**, Ge, J. & Chakraborty, A., First High Contrast Imaging Using a Gaussian Aperture Pupil Mask 2002, ApJm 572, L165
- Debes, J. H.** & Sigurdsson, S., Are There Unstable Planetary Systems Around White Dwarfs? 2002, ApJ, 572, 556

Conference Proceedings

- Debes, J. H.**, Sigurdsson, S. 2006, 15th European White Dwarf Conference
- Debes, J. H.**, Sigurdsson, S., & Woodgate, B. 2004, Astrobiology, 4, 232
- Debes, J. H.**, Ge, J., Kuchner, M., & Rogosky, M. 2003, Proc. SPIE, 5170, 57
- Ge, J., **Debes, J. H.**, McDavitt, D. L., Miller, S., & Bernecker, J. L. 2003, Proc. SPIE, 4850, 764
- Ge, J., Chakraborty, A., **Debes, J. H.**, Ren, D., & Friedman, J. 2003, Proc. SPIE, 4841, 1503
- Debes, J. H.**, Ge, J., Mandelowitz, C., & Watson, A. 2003, Proc. SPIE, 4860, 138
- Debes, J. H.** & Ge, J. 2003, ASP Conf. Ser. 294: Scientific Frontiers in Research on Extrasolar Planets, 629
- Debes, J. H.** & Sigurdsson, S. 2002, Astrobiology 2, 645
- Ge, J., **Debes, J. H.**, Watson, A., & Chakraborty, A. 2002, Proc. SPIE, 4835, 87

Invited Talks

- University of Wyoming Department of Physics and Astronomy, colloquium, 11/2010
- University of Montreal Department of Astronomy, colloquium, 11/2010
- Center for Exoplanets and Habitable Worlds, seminar, 10/2010
- University of Delaware Department of Physics, weekly seminar, 9/2010
- Organic Materials in Space–Nature or Nurture?, Meudon, France, 5/2010
- American Natural History Museum, Weekly Seminar, 12/2009
- Harvard-Smithsonian Center for Astrophysics, Solar, Stellar, and Planetary Sciences Division Seminar, 12/09
- Department of Terrestrial Magnetism, Friday Group Meeting, 11/2009
- Space Telescope Science Institute, Star and Planet Formation Seminar, 11/2009

Goddard Space Flight Center, Astrobiology Seminar, 10/2009
Space Telescope Science Institute, Star and Planet Formation Seminar, 7/2008
Carnegie Institution of Washington, Department of Terrestrial Magnetism, Colloquium,
03/2008
Space Telescope Science Institute, Colloquium, 2/2008
NASA Goddard Space Flight Center, Exoplanet Group Talk, 1/2008
University of Maryland, College Park, MD, 9/2007
NASA Goddard Space Flight Center, Exoplanet Group Talk, 12/2006
Naval Research Laboratory, Colloquium, 7/2006
Carnegie Institution of Washington, Department of Terrestrial Magnetism, Colloquium,
10/2004
Villanova University, Department of Astronomy, Colloquium, 3/2002

Contributed Talks

EuroWD 2010, Tuebingen 8/2010
National Capital Area Disks Meeting III 7/2010
Royal Observatory of Edinburgh, Dynamics of Outer Planetary Systems, 11/2009
207th AAS Meeting, Austin, 1/2008
In the Spirit of Bernard Lyot Conference, 6/2007
EuroWD 2006, Leicester, UK, 8/2006
AbSciCon 2006, Washington, DC, 3/2006
205th AAS Meeting, San Diego, Thesis Talk, 1/2005
BioAstronomy 2004, Reykjavik, 7/2004
SPIE's 48th Annual Meeting, San Diego, 8/2003
SPIE's Astronomical Telescopes and Instrumentation, 8/2002

Press Attention

Astronomy Magazine Notes, *Deadly Tides Mean Early Exit for Hot Jupiters* 1/2011
NASA Goddard Web Feature, *Deadly Tides Mean Early Exit for Hot Jupiters*, 9/2010
NASA Goddard Web Feature, *Debris Disks are Blowin' in the Wind*, 9/2009
Vocal Appearance, CBC's Quirks & Quarks, *Anything Out There?*, 3/2008
Lonely Interstellar Earths Might Roam Galaxy, Earth Sky program #5311, 9/2007
Lonely Planets of the Cosmos, skyandtelescope.com, 10/2007

Pushing the Limit: Possible First Photo of Extrasolar Planet, space.com, 5/2004

Tales From the Stellar Grave: Born Again Planets, space.com, 2/2002

Leadership Activities

Co-organizer, GSFC Exoplanet Seminar, 2010

Referee, ApJ, AJ, MNRAS, and Science, 2005-2010

Member, Local Organizing Committee for "Signposts of Planets" Conference, 2010

Member, Planetary and Solar System Formation Panel, HST Cycle 18 TAC, 2010

Member, Scientific Organizing Committee of the "Organic Materials in Space: Nature or Nurture?" Workshop, 2009

Co-coordinator, National Capital Area Disks Meeting, 2009

Participant, CNSF lobbying effort, 2006

Public Outreach

Contributor, "Ask an Astrophysicist", GSFC, 2010

Contributor, "Ask Astro", Astronomy Magazine, 2010

Co-coordinator Penn State BioDays, 2004,2005

Volunteer, Penn State AstroFest, 2000-2005

Teacher at Penn State University Kid's College, 2003

Volunteer for Penn State High School Teacher's workshops, 2001,2002